

Remarks

The Office Action dated June 4, 2009, has been received and noted. Careful reconsideration of the present application in light of the foregoing amendments and the following remarks is most respectfully requested.

In this response, independent claims 4, 5, 11, 12, 19, 29, 30, 32, and 33 are amended to more particularly point out and distinctly claim the subject matter of the invention. Claims 15 and 16 were previously cancelled, without prejudice to be applied. New dependant claims 39 to 42 are added. The amendments do not add new matter. Support for the amendments may be found throughout the specification and the accompanying figures, for example, on page 10, lines 5-8, 17-19 and previously presented dependent claims. Claims 1-3, 6-10, 13, 14, 17, 18, 25-28 and 31 stand withdrawn following a restriction requirement.

Thus, in addition to the withdrawn claims, claims 4, 5, 11, 12, 19-24, 29, 30, and 32-41 are pending and are respectfully submitted for reconsideration.

Rejections under 35 U.S.C. 102(b)/103(a):

Claims 4, 5, 11, 12, 19-24, 29, 30 and 32-38 stand rejected under 35 U.S.C. 102(b) as allegedly anticipated, or, in the alternative, under 35 U.S.C. 103(a) as allegedly unpatentable over by **Madden** (U.S. Patent No. 6249076). Applicants respectfully traverse the anticipation and

obviousness rejections and respectfully submit that Madden fails to disclose or suggest all the features of any of the presently pending claims.

In particular, Madden fails to disclose or suggest a conductive polymer having a formulation as defined in claims 4, 5, 11, 12, 19-24, 29, 30 and 32-41.

Madden relates to a conducting polymer actuator. An actuator of Madden has an active member including a polymer having a surface. An electrolyte is coupled to the surface. When an electrical potential is applied across the electrolyte between the active member and the counter electrode, a force is exerted. Madden, however, does not disclose or suggest a formulation in which the electrolyte includes anions which include trifluoromethanesulfonate ion and/or four or less fluorine atoms which bond to central atom and more specifically, three or four fluorine atoms, as recited in the pending claims.

Moreover, Madden cannot produce actuators of the present invention because, additionally, Madden does not disclose or suggest a formulation in which the conductive polymer incorporates therein anions which include trifluoromethanesulfonate ion and/or plural of fluorine atoms which bond to central atom where the said anions are present in an amount from 0.1% to 30% by weight of the electrolyte.

Thus, the actuators of Madden would not have the deformation property provided by the process to the conductive polymers used in the devices, actuators and the like. Accordingly, Madden fails to disclose or suggest at least these features of the claims.

Therefore, for at least these reasons, the cited references, either alone or in combination, fail to disclose or suggest all the features of the independent claims, or any of the claims depending therefrom. Applicants respectfully request that the anticipation and the obviousness rejections be withdrawn.

In view of the foregoing amendments and remarks, applicants respectfully submit that all issues raised in the Office Action are hereby addressed and rendered moot.

New Claims:

New claims 39 to 41 are submitted to be dependent upon claim 4, and are allowable over the cited references for at least the reasons given above.

Additionally, new claim 39 further recites that the at least one compound selected from the group consisting of sulfonic acid salts has less than 4 carbon atoms.

Additionally, new claim 40 recites that the deformation ratio of the conductive polymer is at least 3% in the longitudinal direction.

Additionally, new claim 40 recites that the electrochemical stress of the conductive polymer is at least 3.9MPa.

Conclusion:

In view of the above, applicants respectfully submit that claims 1-14 and 17-41 are distinguishable over the cited references, and that these claims be passed to allowance. With this response, all issues raised by the office action are hereby addressed and resolved.

In the event that the Examiner desires to discuss any aspect of this application to expedite allowance, the Examiner is encouraged to contact the undersigned. In the event that any fees are now due, please charge our Deposit Account No. 50-4080.

Respectfully submitted,

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